
In re Ludtke and Sloan

(CCPA)

169 USPQ 563

Decided May 6, 1971

No. 8513

U.S. Court of Customs and Patent Appeals

Headnotes

PATENTS

1. Board of Appeals - In general (§ 19.05)

If Board rejected claim on cited reference not listed in Examiner's Answer, this would constitute a new ground of rejection.

2. Board of Appeals - General affirmance (§ 19.25)

Court of Customs and Patent Appeals - Issues determined - Ex parte patent cases (§ 28.203)

Since Board did not expressly reverse rejections set forth in Examiner's Answer, they are properly before court.

3. Court of Customs and Patent Appeals - Issues determined - Ex parte patent cases (§ 28.203)

Pleading and practice in Patent Office - Rejections (§ 54.7)

Court does not consider possible rejections, which may or may not have been relied on, since applicants were not adequately notified of reasons for those rejections as required by procedural due process and 35 U.S.C. 132 inasmuch as these possible rejections were not spelled out with any degree of particularity; fact that applicants attempted in their brief to guess at what rejections were and to respond to them does not bring those issues before court.

Copyright 2003, The Bureau of National Affairs, Inc. Reproduction or redistribution, in whole or in part, and in any form, without express written permission, is prohibited except as permitted by the BNA Copyright Policy.

<http://www.bna.com/corp/index.html#V>

4. Claims - Functional - In general (§ 20.451)

There is nothing intrinsically wrong with use of functional language in claim.

5. Claims - Functional - In general (§ 20.451)**Patentability - New use or function - In general (§ 51.551)**

Since only alleged distinction between applicants' claims and reference is recited in functional language, it is incumbent upon applicants, when challenged, to show that device disclosed by reference does not actually possess such characteristics.

Particular patents-Parachute

Ludtke and Sloan, Sequential Opening Parachute, claims 1 to 7 of application refused.

Case History and Disposition:

Page 563

Appeal from Board of Appeals of the Patent Office.

Application for patent of William P. Ludtke and George J. Sloan, Jr., Serial No. 550,711, filed May 17, 1966; Patent Office Group 315. From decision rejecting claims 1 to 7, applicants appeal. Affirmed.

Attorneys:

John O. Tresansky, Washington, D. C., for appellants.

S. Wm. Cochran (Edward E. Kubasiewicz of counsel) for Commissioner of Patents.

Judge:

Before Rich, Almond, Baldwin, and Lane, Associate Judges, and Skelton, Judge, United States Court of Claims, sitting by designation.

Opinion Text**Opinion By:**

Almond, Judge.

This is an appeal from the decision of the Patent Office Board of Appeals, adhered to on reconsideration, affirming the rejection of claims 1-7 of appellants' application entitled **Copyright 2003, The Bureau of National Affairs, Inc. Reproduction or redistribution, in whole or in part, and in any form, without express written permission, is prohibited except as permitted by the BNA Copyright Policy.**

<http://www.bna.com/corp/index.html#V>

"Sequential Opening Parachute." ¹ No claims have been allowed.

The invention relates to a parachute canopy which will sequentially open and thus gradually decelerate. The result of such sequential opening is the reduction of the opening shock force on the parachute and on the load being carried by it. Appellants' parachute canopy is shown, in the fully opened form, in Fig. 1 (see page 564).

The canopy is constructed of a plurality of circumferentially complete panels (15, 17, and 19) of fabric material maintained separated by tie lines (27). The size of the spaces or gaps (21 and 23) between the panels is such that the outwardly disposed panel will sequentially deploy as the parachute's velocity of descent is reduced by the deployment of the

Page 564

Fig. 1

Tabular, graphic, or textual material set at this point is not available. Please consult hard copy or call BNA PLUS at 1-800-452-7773 or 202-452-4323.

prior inwardly disposed panels. This operation is achieved by spacing apart each panel a distance which provides a lower critical velocity, i.e., the velocity at which panel inflation occurs, for each outwardly disposed panel.

Claim 1 is illustrative:

1. A parachute canopy comprising-
a plurality of circumferentially complete panels of successively larger circumferences; and
a plurality of radially extending tie lines interconnecting said panels in a radially spaced relationship said plurality of tie lines providing a radial separation between each of said panels upon deployment creating a region of high porosity between each of said panels such that the critical velocity of each successively larger panel will be less than the critical velocity of the previous panel, whereby said parachute will sequentially open and thus gradually deaccelerate.

Claims 2-7 add various minor details, such as the shape of the panels, etc. Except for claim 7, which is specifically directed to a parachute canopy using ribbon fabric for the panels, the claims on appeal have not been considered individually either by the Patent Office or by appellants.

The first problem it is necessary to settle is what grounds of rejection are before us and which references are involved in those rejections. In the final action, the examiner rejected claims 1-6 under 35 U.S.C. 102 as anticipated by either Ball, ² Mallory, ³ Eckstrom ⁴ or Menget. ⁵ Claim 7 was rejected under 35 U.S.C. 103 as unpatentable over either Ball, Mallory, Eckstrom, or Menget in view of Sepp, Jr. ⁶ In his Answer, the examiner stated that claims 1-6 "have been rejected under 35 U.S.C. 102 as anticipated by the Menget reference" and that claim 7 "has been rejected under 35 U.S.C. 103 as unpatentable over Ball or Menget each in view of Sepp, Jr." For reasons which become

Copyright 2003, The Bureau of National Affairs, Inc. Reproduction or redistribution, in whole or in part, and in any form, without express written permission, is prohibited except as permitted by the BNA Copyright Policy.

<http://www.bna.com/corp/index.html#V>

readily apparent, we reproduce the board's opinion in full:

This is an appeal from the final rejection of claims 1 through 7, all the claims in the case.

References relied upon are:

Ball 1,511,154 Oct. 7, 1924

Mallory 2,472,601 June 7, 1949

Sepp, Jr. 3,240,451 Mar. 15, 1966

Menget (France) 853,261 Nov. 28, 1939

We have reviewed the present specification and claims and find as a result of our review that the claims do not patentably distinguish over the prior art.

In our review of the specification we find no disclosure therein from which the routineer would be taught how to achieve the alleged critical relationship set out in the claims.

Also, in our review of the prior art, particularly Mallory, we noted that this reference discloses the structural elements viz.: circumferentially complete panels of successively larger circumference, radial tie lines connecting the panels, and providing a radial spaced relationship for the panels as recited in claim 1.

Lines 7-11 of the copy of this claim in the brief have no patentable significance for any of the following reasons:

1. The relationship which provides for the sequential opening of the panels is not disclosed.

2. The statement in these lines of the claims is merely the citation of a desired result, which is not a structural limitation.

3. The descriptive matter in columns 3 and 4 of Mallory recites a successive opening of the different panels at different velocities.

Accordingly, we will sustain the rejection of this claim under 35 U.S.C. 103.

Page 565

Claims 2 through 7 are likewise found to be unpatentable over the prior art.

Accordingly, we will sustain the rejection of these claims under 35 U.S.C. 103.

We have carefully considered the contentions and arguments presented in appellants' various papers, as well as those presented at the hearing, but we are of the opinion that the examiner's rejection was proper and it will be sustained.

The decision of the examiner is affirmed.

[1] Not too surprisingly, appellants requested reconsideration, inquiring as to whether new grounds of rejection were being made and, if so, what they were. Appellants assumed that the rejection of claims 1-6 under 35 U.S.C. 103 was a new ground, but they weren't sure which references or combination of references were involved or how the references were being applied. In addition, appellants felt that some of the board's language implied that at least claim 1 was rejectable using Mallory alone (apparently

Copyright 2003, The Bureau of National Affairs, Inc. Reproduction or redistribution, in whole or in part, and in any form, without express written permission, is prohibited except as permitted by the BNA Copyright Policy.

<http://www.bna.com/corp/index.html#V>

under 35 U.S.C. 102, although § 102 was never mentioned by the board), which would also be a new ground of rejection since Mallory was not listed by the examiner in his Answer as a reference being relied upon. In re Flint, 51 CCPA 1230, 330 F.2d 363, 141 USPQ 299 (1964); In re Corbin, 30 CCPA 1238, 136 F.2d 713, 58 USPQ 472 (1943). Likewise, although 35 U.S.C. 112 was not mentioned, appellants felt that the board intended rejections thereunder (again at least for claim 1) as being based upon an insufficient disclosure and containing functional language. The board's response to appellants' request for reconsideration was:

Petitioner requests reconsideration of our decision of June 26, 1968.

We have reviewed our decision in the light of the comments in the petition, and as a result of our review find no basis for making any changes in the decision.

The petition is granted to the extent of reviewing our decision but denied as to making any changes therein.

[2] We will consider only the rejection of claims 1-6 under 35 U.S.C. 102 as anticipated by Menget and the rejections of claim 7 under 35 U.S.C. 103 as unpatentable over Menget or Ball each in view of Sepp, Jr. (Sepp). These rejections were clearly set forth in the examiner's Answer; the board did not expressly reverse them, and therefore they are properly before us. In re Wagenhorst, 20 CCPA 991, 64 F.2d 780, 17 USPQ 330

[3] (1933). We will not consider the numerous other possible rejections, which may or may not have been relied on, since we do not think appellants were adequately notified of the reasons for those rejections as required by procedural due process and 35 U.S.C. 132. In re Hughes, 52 CCPA 1355, 345 F.2d 184, 145 USPQ 467 (1965); see In re Jacobson, 56 CCPA 982, 407 F.2d 890, 160 USPQ 795 (1969). We can see at least eighteen possible rejections (two § 112 rejections, one § 102, and 15 § 103 rejections, taking the various possible combinations of the references into consideration) in the board's opinion. None of these possible rejections was spelled out with any degree of particularity whatsoever, and we certainly can understand appellants' confusion in regard thereto. In addition, the solicitor would also have us consider the three § 102 and three § 103 rejections in the examiner's final rejection, even though they were dropped in the Answer. Appellants have attempted in their brief to guess at what the various rejections were and to respond to them. The fact that they done so does not bring those issues before us. In re Benson, 169 USPQ 548, decided May 6, 1971. If we were to consider all those issues on this appeal, we would be doing so without affording appellants an opportunity to be heard in the administrative tribunals of the Patent Office. In re Hughes, *supra*.

After considering the rejection of claims 1-6 under 35 U.S.C. 102 as anticipated by Menget, the reasoning behind this rejection, and the arguments of counsel in regard to it, we are convinced that the rejection must be sustained. Likewise, we will also sustain the rejection of claim 7 under 35 U.S.C. 103 as unpatentable over Menget in view of Sepp. Therefore, a discussion of the rejection of claim 7 as unpatentable over Ball in view of Sepp becomes unnecessary.

Menget discloses a parachute canopy as shown in Figs. 1 and 2 (see page 566):

Three circumferentially complete panels or bands (a 1, a 2, and a 3) of fabric material are joined by ties (b) which provide for spaces or gaps between each panel and the next.

Copyright 2003, The Bureau of National Affairs, Inc. Reproduction or redistribution, in whole or in part, and in any form, without express written permission, is prohibited except as permitted by the BNA Copyright Policy.

<http://www.bna.com/crp/index.html#V>

It is stated that the "ratios between the width of the bands or rings and the empty spaces separating them may vary." Menget also states that "because of the distribution of the air passages over the entire surface of the canopy, a parachute according to the invention has greater stability than an ordinary parachute, and * * * its unfolding at the moment of launching is made easier, without jolts and with safety."

The examiner in his Answer took the position that claims 1-6 "define the distance between the panels of the applicants' device in functional terms, and therefore fail to recite a

Page 566

Fig.1.

Tabular, graphic, or textual material set at this point is not available. Please consult hard copy or call BNA PLUS at 1-800-452-7773 or 202-452-4323.

Fig.2.

Tabular, graphic, or textual material set at this point is not available. Please consult hard copy or call BNA PLUS at 1-800-452-7773 or 202-452-4323.

structure different from * * * [Menget]." In response to appellants' argument that Menget seemingly contemplates complete rather than sequential opening on deployment, the examiner stated:

* * * [I]t is conceded that the Menget patent discloses a parachute which is intended to completely open upon deployment. The operation contemplated by Menget however, does not negate the reference parachute's *inherent* operating characteristics. * * * [I]n order to effect sequential opening the applicants' device *must* be deployed *above* a certain velocity, that is above the critical velocity of the largest panel. The applicant has failed * * * to state why the Menget parachute will not sequentially open if deployed at a sufficient velocity. [Emphasis by examiner.]

Appellants strenuously contend that the claim language in question (for example, from "such that the critical" through "gradually deaccelerate" in claim 1, *supra*) is not functional, that a claim recitation of a dimensional limitation and an operational characteristic to achieve a desired result is a positive limitation, and that this limitation distinguishes the claims from Menget since Menget does not teach successive opening of panels by selective variation of the spatial distances between the panels.

[4] We agree with the Patent Office that the spatial separation between the panels is recited in functional language; however, as we said recently in *In re Swinehart*, 58 CCPA —, — F.2d —, 169 USPQ 226 (1971), there is nothing intrinsically wrong with the use of such claim language. The rationale behind the Patent Office's objection to functional language, which rationale seems particularly applicable here, was discussed in *Swinehart* where this court stated:

* * * [I]t is elementary that the mere recitation of a newly discovered

function or property, inherently possessed by things in the prior art, does not cause a claim drawn to those things to distinguish over the prior art. Additionally, where the Patent Office has reason to believe that a functional limitation asserted to be critical for establishing novelty in the claimed subject matter may, in fact, be an inherent characteristic of the prior art, it possesses the authority to require the applicant to prove that the subject matter shown to be in the prior art does not possess the characteristic relied on.

[5] This is exactly what the examiner did here. It was the examiner's view that the parachute canopy of Menget possessed all the claimed characteristics, including the capability of sequential opening, of appellants' canopy. Therefore, he challenged appellants to show that Menget's canopy did not inherently possess these characteristics. Appellants have not denied that Menget's canopy inherently possesses the capability of sequential opening. In fact, appellants in their brief acknowledge "that such a sequential opening operation possibly may be achieved by Menget." Thus,

Page 567

since the only alleged distinction between claims 1-6 and Menget is recited in functional language, it was incumbent upon appellants, when challenged, to show that the canopy disclosed by Menget does not actually possess such characteristics. This they have failed to do.

Claim 7 was rejected under 35 U.S.C. 103 as unpatentable over Menget in view of Sepp. Sepp discloses a ribbon parachute formed of a plurality of spaced radial ribbons. We agree that it would have been *prima facie* obvious to one of ordinary skill in the art to make the panels of Menget of ribbons as taught by Sepp since it merely involves the substitution of one known parachute material for another. Appellants have not submitted any evidence to overcome a finding of *prima facie* obviousness.

For the foregoing reasons, we *affirm* the decision of the board insofar as it affirmed the rejection of claims 1-6 under 35 U.S.C. 102 as anticipated by Menget and the rejection of claim 7 under 35 U.S.C. 103 as unpatentable over Menget in view of Sepp.

Footnotes

Footnote 1. Serial No. 550,711 filed May 17, 1966.

Footnote 2. U. S. Patent No. 1,511,154, October 7, 1924.

Footnote 3. U. S. Patent No. 2,472,601, June 7, 1949.

Footnote 4. U. S. Patent No. 3,284,032, November 8, 1966.

Footnote 5. French Patent No. 853,261, November 28, 1939.

Footnote 6. U. S. Patent No. 3,240,451, March 15, 1966.

- End of Case -

Copyright 2003, The Bureau of National Affairs, Inc. Reproduction or redistribution, in whole or in part, and in any form, without express written permission, is prohibited except as permitted by the BNA Copyright Policy.

<http://www.bna.com/corp/index.html#V>

